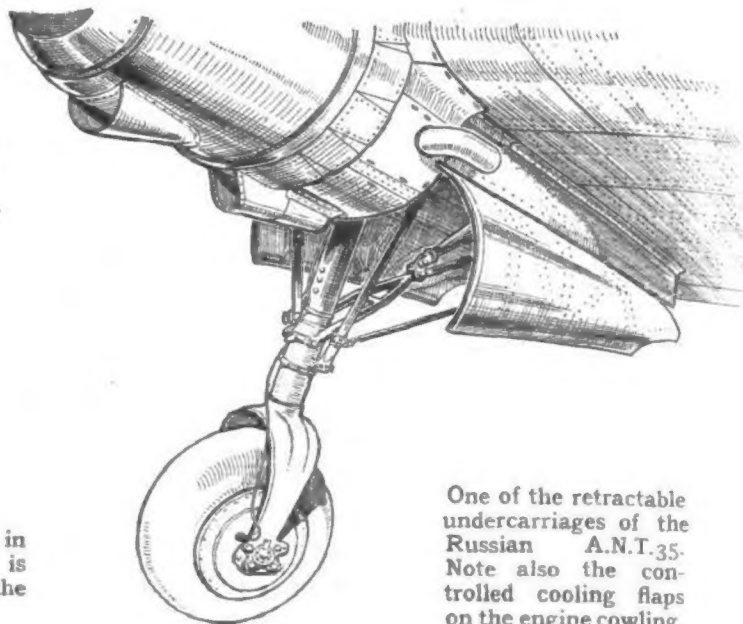
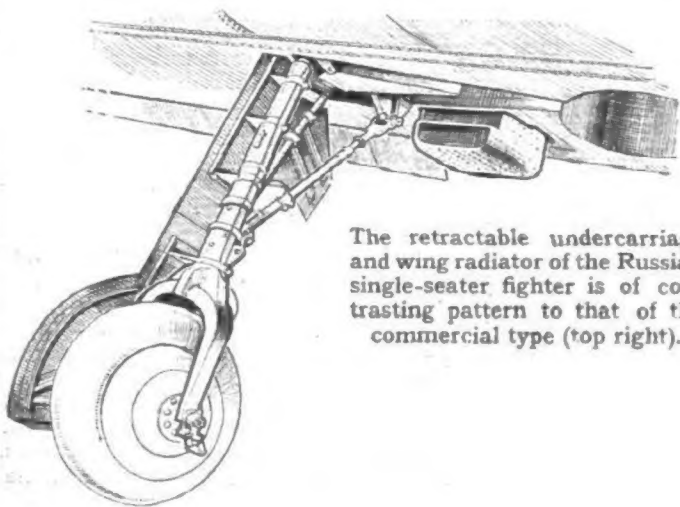


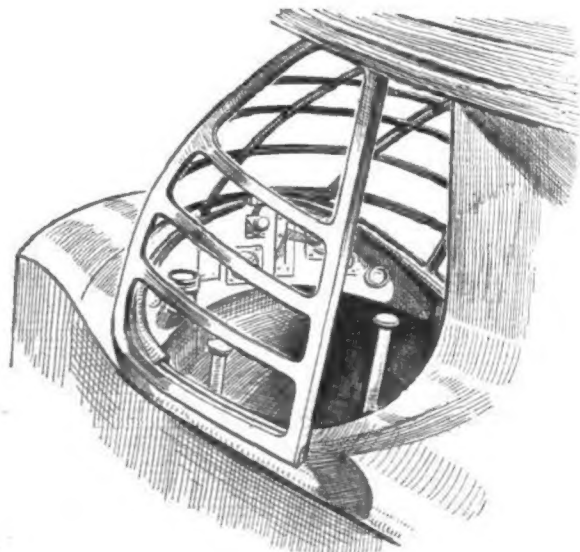
The installation of one of the Walter Minor engines in the trailing edge of the Praga E.210. The undercarriage is of cantilever type, with the springing housed inside the fuselage.



One of the retractable undercarriages of the Russian A.N.T.35. Note also the controlled cooling flaps on the engine cowling.

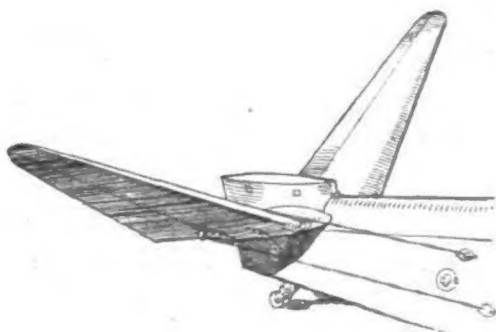


The retractable undercarriage and wing radiator of the Russian single-seater fighter is of contrasting pattern to that of the commercial type (top right).



Conduite Interieure on the S.F.A.N.5. The shape of the fuselage and wing-supporting stub provides a gap for ventilation.

The up-tilted tail-plane of the Mauboussin Corsaire is intended to do away with the need for a rudder.



3,300 lb., giving a gross weight of 17,600 lb.

From these large existing or projected commercial types, there is a considerable drop in size to the next-largest commercial aeroplane actually shown; the Russian A.N.T.35. Generally following the Douglas formula, this machine, designed by A. N. Toupolev, is in the ten-twelve passenger class, and is of all-metal, metal-clad construction. The cabin provides quite roomy accommodation for ten passengers, the seating arrangement being of the orthodox type with a gangway down the centre. Two radial air-cooled engines called in Russia the M.85 type look very like Gnome-Rhône built under licence and are rated at 850 h.p. each. It is claimed that they give the machine a maximum speed of 268 m.p.h. The engines are enclosed in long-chord cowlings carrying controllable flaps on their trailing edges in the

approved modern fashion. The airscrews are three-bladers, of adjustable pitch. The gross weight of the machine is 14,500 lb., the wing span 68 ft. 3 in., and the wing area 625 sq. ft. The wheels retract into the engine nacelles.

Not strictly speaking a commercial type, the other large Russian machine exhibited is the A.N.T.25. This machine, also of all-metal construction, is a single-engined monoplane of very daring design. Aerodynamic efficiency is the chief consideration in the layout of a long-range aeroplane, and in the A.N.T.25 the reduction of induced drag has been carried to the utmost extent, the wing span being no less than 112 ft. As the wing area is 950 sq. ft., this represents an aspect ratio (defined as span-squared divided by area) of no less than 13.2. That Toupolev did succeed in constructing a cantilever monoplane of this aspect ratio in so large a size (gross

weight 25,000 lb.) is evidence of his skill as a designer. That it was worth while seems to be shown by the fact that the A.N.T.25 covered in non-stop flight over a closed circuit a distance of 9,374 km. (5,855 miles). The water-cooled engine of this machine is rated at 1,000 h.p.

In the main, it is left to the Caudron-Renault combination to represent the small commercial and feeder line class of aircraft at the show, not to mention the private owner type, of which this firm exhibits several examples. In sheer numbers the Caudron-Renault stand eclipses any other exhibitor, with seven types on view. In size and power these range from the C.448-449 *Goeland* through the *Typhon*, *Simoun*, *Coupe*, *Deutsch winner*, *Rafale*, and *Ramier*, to the little *Aiglon*.

The *Goeland* is a fast twin-engined low-wing monoplane with accommodation for pilot and 6-8 passengers. The